TITLE 18 ENVIRONMENTAL CONSERVATION CHAPTER 53 FUEL REQUIREMENTS FOR MOTOR VEHICLES

18 AAC 53 Article 1. Oxygenated Gasoline Requirements

18 AAC 53.005. PURPOSE AND APPLICABILITY; GENERAL REQUIREMENTS

- (a) In this chapter, the terms "gasoline," "oxygenated gasoline," and "nonoxygenated gasoline" all relate to fuel that is commonly sold for use in a motor vehicle. Words and phrases used in this chapter are defined in 18 AAC 53.990.
- (b) The purpose of this chapter is to reduce carbon monoxide air pollution from gasoline-powered motor vehicles operating in a control area during a control period established under 18 AAC 53.010.
- (c) The requirements of this chapter apply, as specified in each section, to
 - (1) a person who refines, imports, distributes, transports, carries, blends, supplies, sells, resells, offers for sale, transfers, dispenses, or otherwise markets gasoline, including a CAR or Blender CAR (referred to in this chapter as CAR); and
 - (2) a wholesale purchaser-consumer.
- (d) A person described in (c) of this section
 - (1) may sell, offer for sale, or dispense to an ultimate consumer only oxygenated gasoline in a control area during a control period;
 - (2) shall ensure that oxygenated gasoline meets the requirements of 18 AAC 53.020; to comply with this paragraph,
 - (A) a person who dispenses gasoline downstream of a CAR, including a wholesale purchaser-consumer, shall ensure, before dispensing gasoline to an ultimate consumer, that the oxygen content specified on the product transfer document meets the requirements of 18 AAC 53.020 for the current control period; and
 - **(B)** a person other than a person subject to (A) of this paragraph, shall meet all requirements of this chapter necessary to determine the oxygen content of the gasoline, including testing under 18 AAC 53.030;
 - (3) shall ensure that nonoxygenated gasoline that is refined, imported, distributed, sold, or offered for sale for use in a control area during a control period is sold or distributed only to a

CAR;

- (4) may not misrepresent the oxygen content of gasoline in any way, including in a product transfer document required under 18 AAC 53.105;
- (5) if the person is subject to 18 AAC 53.160, shall ensure that the information in a product transfer document is consistent with testing results under 18 AAC 53.160; and
- (6) shall meet all other applicable requirements of this chapter, including the labeling requirements of 18 AAC 53.007 for dispensers used to dispense oxygenated gasoline.
- (e) Nothing in this chapter prohibits a person from
 - (1) using, refining, distributing, blending, supplying, selling, offering for sale, dispensing, or otherwise marketing oxygenated gasoline
 - (A) at any time that is not a control period; or
 - **(B)** in any area that is not a control area; or
 - (2) storing or causing the storage in a control area during a control period of gasoline that does not meet the oxygen content required by 18 AAC 53.020, if that gasoline is
 - (A) segregated from oxygenated gasoline;
 - **(B)** not dispensed in a control area during a control period; and
 - (C) kept in a sealed storage tank or protected, by a lock or other means, from being sold or dispensed in a manner not in conformance with this chapter.

State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.007. DISPENSER LABELING

- (a) The requirements of this section are mandatory in a control area. The department strongly recommends compliance with this section in all areas of the state. Notwithstanding the provisions of this section that require the labeling to reflect a minimum oxygen content of 2.0 percent by weight, a person may not dispense gasoline in a control area during a control period unless that gasoline meets the requirements of 18 AAC 53.020 for the current control period.
- **(b)** The owner or operator of a dispenser that dispenses oxygenated gasoline shall place on the dispenser a label as described in this subsection, an example of which is shown in Figure 1 of this

subsection. The label must remain on the dispenser until oxygenated gasoline is no longer dispensed from it and must

- (1) identify the type of oxygenate in the gasoline; the following abbreviations may be used on the dispenser label to identify the type of oxygenate in the gasoline:
 - (A) "MTBE" for methyl tertiary butyl ether;
 - **(B)** "ETBE" for ethyl tertiary butyl ether; and
 - (C) "TAME" for tertiary amyl methyl ether;
- (2) state the gasoline's maximum oxygenate content by volume;
- (3) state that the gasoline has an oxygen content of not less than 2.0 percent by weight;
- (4) include the statement: "The gasoline dispensed from this pump is oxygenated and will reduce carbon monoxide pollution from motor vehicles";
- (5) use legible lettering in block style of at least 20 point bold type;
- (6) use lettering that is of a color that contrasts with the color of the label background and use a background color that contrasts with the color of the dispenser; and
- (7) be placed on the upper two-thirds of the dispenser, in a position that will be conspicuous to the consumer.

Figure 1. Example of label required by this subsection (not shown in the required 20 point block print)

THE GASOLINE DISPENSED FROM THIS PUMP IS OXYGENATED AND WILL REDUCE CARBON MONOXIDE POLLUTION FROM MOTOR VEHICLES. THE GASOLINE IS OXYGENATED WITH ETHANOL AND CONTAINS NO MORE THAN 10 PERCENT ETHANOL BY VOLUME. ITS OXYGEN CONTENT IS NOT LESS THAN 2.0 PERCENT BY WEIGHT.

(c) Unless the oxygenate in the gasoline is MTBE or ETBE, the owner or operator shall place on the dispenser a second label, an example of which is shown in Figure 2 of this subsection. The label must remain on the dispenser until oxygenated gasoline is no longer dispensed from it and must

- (1) meet the requirements of (b)(5), (6), and (7) of this section;
- (2) be placed immediately adjacent to the label required by (b) of this section; and
- (3) read: "Warning: The Federal Aviation Administration prohibits the use of this fuel in aircraft."

Figure 2. Example of label required by this subsection (not shown in the required 20 point block print)

WARNING: THE FEDERAL AVIATION ADMINISTRATION PROHIBITS THE USE OF THIS FUEL IN AIRCRAFT

State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.010. CONTROL PERIODS AND CONTROL AREAS

- (a) For the purposes of this chapter, the department will establish a control period for one or more of the control areas described in (c) of this section. Not less than 180 days before the control period begins, the department will
 - (1) publish notice in a newspaper serving each control area that will be subject to the control period; and
 - (2) send the notice to each CAR registered under 18 AAC 53.070 for the previous control period.
- (b) If the department establishes a control period under (a) of this section, that control period will begin
 - (1) on or after November 1 in the first year, and will end at midnight on the following March 1; and
 - (2) on November 1 in each subsequent year, and will end at midnight on the following March 1.
- (c) For the purposes of this chapter, the following are control areas:
 - (1) Municipality of Anchorage; and
 - (2) Fairbanks North Star Borough, including the City of Fairbanks.

State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.020. REQUIRED OXYGEN CONTENT

- (a) Except as provided in (b) of this section, for the period beginning five days before the first day of a control period and ending on the last day of that control period, all gasoline sold, offered for sale, or distributed by a CAR for use in a control area during a control period must be oxygenated so that each blend of gasoline has an oxygen content of
 - (1) not less than 2.7 percent by weight if the CAR is using the per-gallon method of compliance under 18 AAC 53.035; or
 - (2) not less than 2.0 percent by weight if the CAR is using the averaging method of compliance under 18 AAC 53.040.
- **(b)** The provisions of (a) of this section do not preclude the sale or distribution of gasoline that does not meet the requirements of (a) of this section if that gasoline is sold or distributed to another CAR.
- (c) The actual oxygen content of a gallon of oxygenated gasoline must be determined in accordance with the calculations set out in 18 AAC 53.030.
- (d) A person who intends to offer for sale, sell, or dispense gasoline downstream of a CAR in a control area during a control period may sell or dispense only gasoline that contains not less than 2.7 percent oxygen by weight unless the department has published notice that one or more CARs will use the averaging method of compliance under 18 AAC 53.040. If the department issues a notice under this subsection, the notice will
 - (1) be published at least 10 days before the control period begins; and
 - (2) state that
 - (A) gasoline offered for sale, sold, or dispensed downstream of a CAR in that control area during that control period must contain not less than 2.0 percent oxygen by weight; and
 - **(B)** the minimum of 2.0 percent oxygen by weight applies only during the current control period unless the department publishes notice under this subsection in a subsequent control period.
- (e) For each gallon of gasoline produced or imported for sale or distribution in or from a control aea during a control period, a refiner or importer shall document the
 - (1) oxygen content, using a method described in 18 AAC 53.030;
 - (2) oxygenate type; and

18 AAC 53.030. SAMPLING, TESTING, AND OXYGEN CONTENT CALCULATIONS

- (a) To comply with the requirements of this chapter, the oxygen content of gasoline must be determined by
 - (1) taking a representative sample of the gasoline to be tested, using the sampling methods specified in 40 C.F.R. 80, Appendix D, as amended through July 1, 1996, hereby adopted by reference;
 - (2) testing the gasoline sampled to determine the mass concentration of each oxygenate, using the test method specified in ASTM D 4815-94a, as approved July 25, 1994, hereby adopted by reference; and
 - (3) using the following oxygen content calculations, with volume measurements adjusted to 60" Fahrenheit:
 - (A) for blends with only one oxygenate:

$$W_{oxygen} = \underbrace{ \begin{array}{c} V_{oxygenate} \; x \; d_{oxygenate} \; x \; W_{oxygen/oxygenate} \\ \hline (V_{gas} \; x \; d_{gas}) + (V_{oxygenate} \; x \; d_{oxygenate}) \end{array} }$$

where:

W = weight fraction (for percent, multiply by 100)
oxygenate = oxygenate in the blend
V = volume fraction

V = volume fraction d = specific gravity gas = gasoline

(B) for blends with more than one oxygenate:

$$W_{oxygen} = \underbrace{ \begin{array}{c} E \ (V_{oxygenate} \ x \ d_{oxygenate} \ x \ W_{oxygen/oxygenate}) \\ \hline (V_{gas} \ x \ d_{gas}) + E \ (V_{oxygenate} \ x \ d_{oxygenate}) \end{array} }$$

where:

W = weight fraction (for percent, multiply by 100)

oxygenate = oxygenate in the blend

V = volume fraction d = specific gravity gas = gasoline

(b) The oxygen molecular weight contributions of an oxygenate approved for use under this chapter are set out in the following table:

OXYGEN MOLECULAR WEIGHT CONTRIBUTIONS

Oxygen Molecular Specific Gravity Weight Contribution at 60 Fahrenheit

| Methanol | 0.4993 | 0.796 | |
|--------------------------------------|--------|-------|--|
| Ethanol | 0.3473 | 0.794 | |
| Propanols | 0.2662 | 0.789 | |
| Butanols | 0.2158 | 0.810 | |
| Pentanols | 0.1815 | 0.817 | |
| | | | |
| Methyl Tertiary-Butyl | | | |
| Ether (MTBE) | 0.1815 | 0.744 | |
| Hexanols | 0.1566 | 0.823 | |
| Ethyl Tertiary-Butyl | 0.1560 | 0.755 | |
| Ether (ETBE) | 0.1569 | 0.755 | |
| Tertiary Amyl Methyl Ether (TAME) | 0.1566 | 0.770 | |
| | | | |

Editor's note: The sampling and testing procedures referred to in this section may be reviewed at the department's Anchorage, Fairbanks, or Juneau offices. ASTM D 4815-94a may be ordered from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428 (610 832-9500).

State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.035. PER-GALLON METHOD OF COMPLIANCE

- (a) A CAR using the per-gallon method of compliance with this chapter shall document that each gallon of gasoline sold or dispensed for use within a control area during a control period has an oxygen content of not less than 2.7 percent by weight.
- **(b)** A CAR using the per-gallon method of compliance
 - (1) must use that method for the entire control period; and
- (2) is prohibited from transferring oxygen credits to another CAR State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.040. AVERAGING OXYGEN CONTENT METHOD OF COMPLIANCE

- (a) A CAR using the averaging oxygen content method of compliance with this chapter shall document that the average oxygen content of the total volume of gasoline sold or transferred for use in a control area during a control period, including a debit or credit balance of applicable oxygen credits, is not less than 2.7 percent by weight.
- **(b)** A CAR using the averaging oxygen content method of compliance must use that method for the entire control period.
- (c) Repealed 10/31/97,
- (d) Calculation of the following totals is necessary to determine whether, at the end of each control period and for each control area, a CAR is in compliance with this chapter:
 - (1) the total volume of oxygenated gasoline sold or dispensed in the control area, which is
 - (A) the total volume of each separate batch or truckload of oxygenated gasoline sold or dispensed in the control area; plus
 - **(B)** the total volume of oxygenated gasoline for which the CAR has received credit by the purchase of oxygen credits; minus
 - (C) the total volume of oxygenated gasoline for which the CAR has sold oxygen credits to another CAR:
 - (2) the total required content of oxygen, which is the total volume of oxygenated gasoline sold or dispensed, as determined in (1) of this subsection, multiplied by 2.7 percent;
 - (3) the total content of oxygen actually sold or dispensed in the control area, which is
 - (A) the oxygen content of each separate batch or truckload of oxygenated gasoline sold or dispensed in the control area, multiplied by the actual volume of that batch or truckload; plus
 - **(B)** the oxygen content of oxygenated gasoline for which the CAR has received credit by the purchase of oxygen credits, multiplied by the volume of that gasoline; minus
 - (C) the oxygen content of oxygenated gasoline for which the CAR has sold oxygen

credits to another CAR, multiplied by the volume of that gasoline.

- (e) If the actual total content of oxygen is equal to or greater than the required total content of oxygen, the standard of 18 AAC 53.020 is met. If the actual total content of oxygen is less than the required total content of oxygen, the purchase of oxygen credits is required in order to comply with 18 AAC 53.020.
- (f) To determine the oxygen content associated with each batch or truckload of oxygenated gasoline sold or dispensed in a control area, a CAR shall use the running weighted oxygen content (RWOC) of the terminal storage tank from which the batch or truckload was received at the time the batch or truckload was received. For a batch or truckload of gasoline to which an oxygenate is added outside of the terminal storage tank from which it was received, a CAR shall use the weighted average of the RWOC plus the additional oxygen content as a result of adding the additional oxygenate.
- (g) The RWOC accounts for the volume and oxygen content of all gasoline that enters or leaves a terminal storage tank, and the oxygenate that is added to each tank. The RWOC must be calculated each time gasoline enters or leaves a tank or whenever an oxygenate is added to a tank. The RWOC is calculated weighing the following:
 - (1) the volume, type, and oxygen content of the gasoline in the storage tank at the beginning of the control period;
 - (2) the volume and oxygen content by weight of gasoline entering the storage tank;
 - (3) the volume and oxygen content by weight of gasoline leaving the storage tank; and
 - (4) the volume, type, and oxygen content by weight of the oxygenate added to the storage

State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.045. OXYGEN CREDITS AND DEBITS

- (a) If the averaging oxygen content method of compliance under 18 AAC 53.040 is used by a CAR, an oxygen credit or debit is generated when a gallon of oxygenated gasoline is transferred by the CAR for use in a control area during a control period. An oxygen credit or debit per gallon is calculated by subtracting 2.7 percent from the actual percent of oxygen by weight in a batch or truckload. The total oxygen credits or debits associated with a batch or truckload is the oxygen credit or debit per gallon multiplied by the total number of gallons in that batch or truckload.
- **(b)** To comply with the requirements of this chapter, a CAR may offset a debit balance of oxygen by securing the transfer of an identical number of oxygen credits from another CAR.
- (c) Oxygen credits may be transferred only if the oxygen credits are
 - (1) generated in the same control area in which they are transferred for use by another CAR;
 - (2) generated in the same control period in which they are transferred for use by another CAR;

- (3) transferred no later than 15 days after the last day of the control period in which the oxygen credits are generated; and
- (4) created as required by this chapter.
- (d) If oxygen credits are sold, purchased, or otherwise transferred, the transferor shall provide the transferee with a record of the transaction as required in 18 AAC 53.090(d).
- (e) Oxygen credits may not be transferred if such a transfer would result in the transferor having a debit balance of oxygen at the conclusion of the control period for which the oxygen credits would be transferred. Oxygen credits transferred in violation of this subsection are invalid oxygen credits.
- **(f)** Invalid oxygen credits may not be used, regardless of the transferee's good faith belief that it was receiving valid oxygen credits.
- (g) If oxygen credits are transferred in violation of (d) of this section
 - (1) the transferor is in violation of 18 AAC 53.040; and
- (2) the transferor's valid oxygen credits will be applied first to any oxygen credit transfer agreements before the transferor may apply any oxygen credits to achieve its own compliance. State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.060. OXYGENATED GASOLINE BLENDING

- (a) In addition to the other applicable requirements of this chapter, a person may not refine, distribute, blend, supply, sell, offer for sale, dispense, or otherwise market oxygenated gasoline for use in a control area during a control period unless that product
 - (1) has received a current motor fuel waiver from the United States Environmental Protection Agency (EPA) under 42 U.S.C. 7545(f)(4) (Clean Air Act), as amended through November 15, 1990; or
 - (2) qualifies under EPA's "substantially similar" interpretive ruling as amended in 56 Fed. Reg. 5,352 (1991) for a fuel or fuel additive used to certify a model year 1975 or newer vehicle or engine under 42 U.S.C. 7525 (Clean Air Act), as amended through November 15, 1990.
- **(b)** Repealed 10/31/97.
- (c) Repealed 10/31/97.

State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.070. REGISTRATION AND PERMIT

(a) A person may not operate as a CAR unless the person has registered with, and obtained a permit from, the department. A person who intends to operate as a CAR shall apply for registration and a permit to operate in each control area at least 30 days before the beginning of a control period or at

least 30 days before operating as a CAR. An application for each control area must be on a form available from the department and must include

- (1) the applicant's name and business address;
- (2) the address and physical location of each control area terminal from which the applicant will operate;
- (3) the address and physical location of each control area oxygenate blending facility that the applicant owns, leases, operates, controls, or supervises;
- (4) the address and physical location where the applicant will keep the documents required under this chapter;
- (5) the registration fee required in 18 AAC 53.080(a); and
- (6) the preliminary permit fee required in 18 AAC 53.080(b) or (c), as applicable.
- **(b)** A CAR shall submit updated registration information to the department within 30 days after any information supplied under (a) of this section becomes incomplete or inaccurate.
- (c) Within 30 days after the department receives a complete application and the fees required in (a) of this section, it will register the CAR and issue a permit with an identification number. The registration and permit are valid for one year.

State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.080. CAR FEES

- (a) A person who applies for registration and a permit to operate as a CAR under this chapter shall pay a \$100 annual registration fee with the application for each control area.
- (b) Except as provided in (c) of this section, a CAR shall pay, with the application for a control area, a preliminary permit fee that is equal to \$0.0053 per gallon, multiplied by the total number of gallons of gasoline sold by the CAR within that control area during the preceding November 1 through March 1.
- (c) If a CAR had no gasoline sales in a control area during the preceding November 1 through March 1, the CAR shall pay, with the application for that control area, a preliminary permit fee that is equal to \$0.0053 per gallon, multiplied by the total number of gallons of gasoline estimated to be sold by the CAR within that control area during the upcoming control period.
- (d) On or before May 1, for each application for which a fee is payable under (b) or (c) of this section, a CAR shall pay to the department a final permit fee that is equal to \$0.0053 per gallon, multiplied by the total number of gallons of oxygenated gasoline sold by the CAR for use within the applicable control area during the control period that just ended, minus the preliminary fee paid under (b) or (c) of this section. If the preliminary fee is greater than the amount determined under this subsection, no additional fee is due and the department will refund the excess fees paid by July 15.

(e) By July 15, the department will refund fees in excess of those required to cover the cost of implementing the requirements of this chapter. Fees will be refunded on a pro rata basis, in direct proportion to the CAR's percentage contribution to the total fees collected.

State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.090. RECORDKEEPING

- (a) A person required to maintain records described in this section shall keep each record for at least five years after that record was produced and shall make the record available to the department upon request..
- (b) A refiner or an importer shall, for each separate quantity of gasoline produced or imported for use in a control area during a control period, maintain a record of the
 - (1) results of any test used to determine the type of oxygenates and percentage by volume;
 - (2) oxygenate content by volume;
 - (3) oxygen content by weight;
 - (4) total volume; and
 - (5) name and address of the party to whom each separate quantity of gasoline was sold or transferred.
- (c) A person who owns, leases, operates, or controls a gasoline terminal that serves a control area shall maintain a record of the
 - (1) name and address of the owner of each batch of gasoline;
 - (2) volume of each batch or truckload of gasoline going into or out of the terminal;
 - (3) RWOC for each batch or truckload of gasoline leaving the terminal;
 - (4) type, purity, and percentage by volume of oxygenate used, if available;
 - (5) oxygen content by weight of each batch or truckload received at the terminal;
 - (6) destination of each batch or truckload of gasoline sold, regardless of whether the destination was within a control area:
 - (7) name and address of the person to whom the batch or truckload of gasoline was sold or transferred and the date of the sale or transfer; and
 - (8) results of any test for oxygenates, if performed, at the time of each sale or transfer of gasoline, and who performed the test.

- (d) In addition to the requirements of (c) of this section, a CAR shall maintain a record of
 - (1) the CAR's permit number;
 - (2) any information that would support or demonstrate compliance with the required oxygen content standard set out in 18 AAC 53.020:
 - (3) each transaction in which an oxygen credit was bought, sold, traded, or transferred; the record of each transaction must include
 - (A) the date of each transaction;
 - (B) the name, address, and permit number of the CAR or blender CAR involved in the transaction;
 - (C) the amount of oxygen credits transferred;
 - (D) a description of how the oxygen credits were calculated; and
 - (E) documentation that shows both parties have agreed to the oxygen credit transaction;
 - (4) the name and address of the person conducting an attest engagement required under 18 AAC 53.170 and the results of the attest engagement or, if using the per-gallon method of compliance described in 18 AAC 53.035, each final report and certification statement required by 18 AAC 53.100(c);
 - (5) the name and address of the person from whom each shipment of gasoline was received, and the date when it was received;
 - (6) each bulk shipment of gasoline received, including the
 - (A) volume of each shipment;
 - (B) type, purity, and percentage by volume of oxygenate; and
 - (C) oxygen content by weight;
 - (7) the volume of each bulk shipment of oxygenates;
 - (8) the name and address of the person from whom a bulk shipment of oxygenate was received;
 - (9) the date and destination of each sale of gasoline, whether or not it was intended for use within a control area;
 - (10) each shipment of gasoline sold or distributed including the

- (A) volume of each shipment;
- (B) type, purity, and percentage by volume of oxygenate; and
- (C) oxygen content by weight;
- (11) the results of all tests done to determine the oxygen content of gasoline; and
- (12) the name, address, and permit number of each CAR to whom any gasoline was sold or distributed, and the date of each transaction.
- (e) A retailer or a wholesale purchaser-consumer within a control area shall maintain a record of
 - (1) the name, address, and permit number of each CAR from whom a shipment of gasoline was purchased or received, and the date each shipment was received; and
 - (2) each shipment of gasoline bought, sold, or transported, including the
 - (A) volume of each shipment;
 - (B) type, purity, and percentage by volume of oxygenate;
 - (C) oxygen content by weight;
 - (D) destination of each sale or shipment of gasoline, whether or not it is intended for use within a control area; and
- (E) bill of lading (BOL) number or product transfer document invoice number. State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.100. REPORTING

- (a) On forms approved by the department, a CAR shall submit to the department the information gathered to show compliance with 18 AAC 53.035 or 18 AAC 53.040 for each control period, as follows:
 - (1) a monthly interim report for November, December, and January, no later than 30 days after the last day of each month; and
 - (2) a summary report, within 30 days after the end of each control period.
- (b) At the end of each control period, a CAR must have an attest engagement conducted in accordance with 18 AAC 53.170 if the averaging oxygen content method of compliance under 18 AAC 53.040 was used. The CAR shall submit an attest engagement report to the department by the June 15 following the relevant control period.
- (c) By the June 15 following each control period, a CAR shall submit a final report if the per-gallon

method of compliance under 18 AAC 53.035 was used. The report must be on a form provided by the department and must include the documentation required by 18 AAC 53.035. The department's report form will contain the statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this report are true, accurate, and complete. I understand that any falsification of this report is subject to punishment under AS 11.56.210." An official of the CAR who is responsible for the documentation shall sign the report form in the space provided after the certification statement and have the signature notarized.

(d) The department will, in its discretion, perform an audit to verify information and documentation provided in a report submitted under (a) or (c) of this section.

State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.105. PRODUCT TRANSFER DOCUMENT

- (a) Beginning five days before the first day of a control period until the end of that control period, each time that the physical custody or title to gasoline in or from a control area is transferred, a product transfer document must accompany the gasoline. The requirements of this subsection do not apply when gasoline is dispensed.
- **(b)** A person subject to this chapter may not misrepresent the oxygen content of gasoline in a product transfer document.
- (c) Beginning five days before the first day of a control period until the end of that control period, a person subject to this chapter may not accept delivery of gasoline in or from a control area unless the gasoline is accompanied by a product transfer document.
- (d) If the transferor of the gasoline is a CAR, that CAR shall provide to the transferee a product transfer document containing the information required in this subsection in addition to, or as part of, a bill of lading or invoice. The product transfer document must legibly and conspicuously contain
 - (1) the bill of lading (BOL) or product transfer document invoice number;
 - (2) the date of the transfer;
 - (3) the name, address, and CAR permit number of the transferor;
 - (4) the name and address of the transferee and, if the transferee is a CAR, the transferee's CAR permit number;
 - (5) the volume of gasoline transferred;
 - **(6)** identification of the gasoline as nonoxygenated or oxygenated;
 - (7) the location of the gasoline at the time of the transfer;
 - (8) the type of oxygenate;

- (9) the percentage by volume, to the nearest percent, of oxygenate in the gasoline; and
- (10) the percentage by weight, to the nearest tenth of a percent, of oxygen content in the gasoline.
- (e) If the transferor of the gasoline is downstream of a CAR, the transferor shall ensure that a transfer ticket is marked with the bill of lading or product transfer document invoice number provided by the CAR under (d) of this section, as follows: BOL No. ____. This transfer ticket satisfies the requirements of (a) of this section.

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18 AAC 53.120. INSPECTION AND SAMPLING

With consent from a person subject to this chapter, the department or its designee will

- (1) enter that person's business premises to determine compliance with this chapter;
- (2) inspect records subject to 18 AAC 53.090, 18 AAC 53.100, and 18 AAC 53.105; and
- (3) take gasoline samples for testing.

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18 AAC 53.130. LIABILITY FOR VIOLATION

Except as provided in 18 AAC 53.005(e)(2) and 18 AAC 53.140, if gasoline contained in a storage tank at a facility owned, leased, operated, controlled, or supervised by a person subject to this chapter is found to be in violation of this chapter, the following persons are liable for that violation:

- (1) the retailer, wholesale purchaser-consumer, distributor, reseller, carrier, CAR, refiner, importer, or oxygenate blender who owns, leases, operates, controls, or supervises the facility where the violation is found:
- (2) each CAR, oxygenate blender, distributor, reseller, and carrier who, downstream of the control area terminal, sold, offered for sale, dispensed, supplied, offered to supply, stored, transported, or caused the transportation of gasoline that is in the storage tank containing the gasoline found to be in violation; and
- (3) each refiner, importer, CAR, oxygenate blender, distributor, reseller, and carrier who manufactured, imported, sold, offered for sale, dispensed, supplied, offered for supply, stored, transported, or caused the transportation of gasoline that is in the storage tank containing gasoline found to be in violation.

 State effective: 10/31/97; EPA effective: 2/28/00

18 AAC 53.140. DEFENSES FOR VIOLATION

- (a) Subject to (b) of this section, the following is a defense for a violation of 18 AAC 53.005(d)(1)-(5):
 - (1) the person can demonstrate that the violation was not caused by that person or that person's employee or agent; and

- (2) the oxygen content stated in the product transfer document meets the requirements of 18 AAC 53.020 for the current control period.
- **(b)** A person seeking to assert a defense under this section who is not a retailer or wholesale purchaser-consumer must, in addition to meeting the requirements of (a) of this section, demonstrate that
 - (1) the oxygen content was not misrepresented in the product transfer document or otherwise; and
 - (2) that person conducted a quality assurance sampling and testing program as described in 18 AAC 53.160 at or before the time the violation occurred.
- (c) In defense of a violation found at a facility operating under the corporate, trade, or brand name of a refiner, a refiner must show, in addition to the defense in (a) of this section, that the violation was caused by
 - (1) another person who violated a law, other than 18 AAC 50 or this chapter, including an act of sabotage or vandalism;
 - (2) the action of a reseller, distributor, oxygenate blender, carrier, or a retailer or wholesale purchaser-consumer who violated a contractual obligation imposed by the refiner that was designed to prevent the action that caused the violation, despite periodic sampling and testing by the refiner to ensure compliance with the contractual obligation; or
 - (3) the action of a carrier or other distributor who was not subject to a contract with the refiner but who is used by the refiner for transportation of gasoline, that occurred despite the refiner's specification or inspection of procedures and equipment and the periodic sampling and testing that was reasonably calculated to prevent that action.
- (d) In this section, the term "was not caused" means that the person can demonstrate by reasonably specific evidence, either direct or circumstantial, that the violation was caused or must have been caused by another person.

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18 AAC 53.150. TEMPORARY VARIANCES

- (a) A person may apply for a temporary variance from the requirements of this chapter if, for reasons beyond the applicant's control, the applicant cannot comply with the requirements of this chapter. The department will grant a request for a temporary variance, after public hearing and opportunity for comment, if the department finds that
 - (1) the circumstances prompting the request are extreme and unusual;
 - (2) the benefits to the public of allowing the business to continue operations exceed any detriment to air quality caused by the noncompliance;
 - (3) prudent planning was exercised, the noncompliance was unavoidable, and all reasonable

steps to minimize the extent of the noncompliance are being taken;

- (4) the applicant shows that compliance will be achieved as soon as possible; and
- (5) the applicant agrees to offset all or a portion of the excess emissions associated with the use of nonconforming gasoline, if practicable, and to apply reasonable substitute or alternative air pollution control measures that the department, in its discretion, prescribes.
- **(b)** A temporary variance granted under (a) of this section will be subject to conditions consistent with the reasons for the variance, and will include the following time limits:
 - (1) if the variance is granted on the grounds that there is no practicable means known or available for complying with this chapter, the variance will be effective only until the necessary means of complying become known or available; or
 - (2) if the variance is granted on the ground that it is justified to relieve or prevent hardship of a kind other than that described in (1) of this subsection, the variance will be effective for no more than one year.
- (c) An application for a temporary variance must be submitted to the department and must include
 - (1) the specific grounds upon which the variance is sought, including evidence that the conditions in (a) of this section are met;
 - (2) the proposed date by which compliance will be achieved or reestablished; and
 - (3) a description of the applicants plan to achieve compliance, including any applicable increments of progress.
- (d) Within 30 days after the department receives a complete application under this section, the department will hold a public hearing to determine whether, and under what conditions, a temporary variance will be granted. At least two weeks before the hearing, the department will send written notice to the applicant and the EPA and publish notice of the hearing in a newspaper of general circulation in the affected control area. A notice under this subsection will state that any interested person may present testimony or evidence regarding the request for a variance, including comments concerning the cost of compliance with the regulations and alternative practical methods of complying.
- (e) The department will issue a decision on the request for a variance within 10 days after the public hearing.
- (f) After the department issues a decision on the request for variance, any person adversely affected by the decision may request an adjudicatory hearing in the manner provided in 18 AAC 15.200 18 AAC 15.920.
- (g) A variance granted under this section does not prevent or limit the application of an emergency order issued under AS 46.03.820.

18 AAC 53.160. QUALITY ASSURANCE PROGRAM

- (a) To demonstrate an acceptable gasoline quality assurance program under this chapter, a CAR shall conduct periodic sampling and testing to determine whether the gasoline has an oxygen content that is consistent with the product transfer document required by 18 AAC 53.105.
- (b) A control area terminal owner or operator may not accept gasoline into a control area terminal unless that owner or operator first conducts a quality assurance program as described in (a) of this section.

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18 AAC 53.170. ATTEST ENGAGEMENTS

- (a) To meet the reporting requirements of 18 AAC 53.100(b), a CAR must submit to an attest engagement that consists of a review of the supporting documentation used to prepare reports required under this chapter, for accuracy, completeness, and conformance with the requirements of this chapter.
- **(b)** An attest engagement must be conducted by an independent certified public accountant (CPA) in a manner consistent with applicable professional standards, including those in 12 AAC 04. The CPA may not be an employee of the CAR. Nothing in this subsection prohibits the CPA from requesting assistance from the CAR's internal auditors in accordance with the document entitled *Codification of Statements on Standards for Attestation Engagements*, published by the American Institute of Certified Public Accountants (AICPA), as amended through January 1, 1997.
- (c) A CPA shall exercise due diligence in conducting an attest engagement in accordance with the agreed-upon procedures described in this section.
- (d) Unless another form of sample selection is approved by the department, a CPA shall determine the sample size for each population of supporting documentation that is sampled in the attest engagement as set out in Table 1 of this section. The number of the population from which a sample must be drawn may vary depending on the circumstances for each attest engagement. Sample items must be selected in such a way that the sample can be expected to be representative of the population. If the department approves the use of another method of sample selection, or another method to determine the sample size, that method must be summarized in the attest engagement report.

TABLE 1. POPULATION SAMPLE SIZE

| Number in Population (N) | Sample Size | |
|--------------------------|-------------------------------|--|
| 66 or larger | 59 | |
| 41 - 65 | 41 | |
| 26 - 40 | 31 | |
| 0 - 25 | N or 24, whichever is smaller | |

(e) An attest engagement must include the review and analysis of CAR records that show the

- (1) quantity and oxygen content of gasoline entering the terminal and leaving the terminal in bulk;
- (2) destination, quantity, and oxygen content of each truckload of oxygenated gasoline going to specific covered areas;
- (3) oxygen content of gasoline in storage tanks from which trucks are loaded, and the calculations used to determine the characteristics of the gasoline;
- (4) oxygenate type and amount that was blended; and
- (5) testing results for storage tanks when additional gasoline is added.
- **(f)** Unless other procedures are approved by the department, an attest engagement must include at least the following agreed-upon procedures, as appropriate, when reviewing a CAR's reporting forms:
 - (1) read the reports completed by CAR management and submitted to the department as required in 18 AAC 53.100;
 - (2) obtain from the CAR an inventory reconciliation that summarizes the receipts and deliveries of all gasoline, gasoline blendstocks, and oxygenates by a CAR serving a control area, and
 - (A) test the mathematical accuracy of the inventory reconciliation;
 - **(B)** agree beginning and ending inventory amounts to the company's perpetual inventory records; and
 - (C) agree deliveries into the control area to the reports submitted to the state as required in 18 AAC 53.100, if applicable;
 - (3) obtain a listing of all gasoline, gasoline blendstocks, and oxygenate receipts during the period, and
 - (A) test the mathematical accuracy of the listing;
 - **(B)** agree amounts to the inventory reconciliation; and
 - **(C)** select a representative sample of individual receipts of gasoline, gasoline blendstocks, and oxygenates, and trace details back to source documents;
 - (4) obtain a listing of all gasoline, gasoline blendstocks, and oxygenates sold or dispensed during the period, and
 - (A) test the mathematical accuracy of the listing;
 - **(B)** agree amounts to the inventory reconciliation report; and
 - (C) select a representative sample of individual batches sold or dispensed both into and

outside the control area, and

- (i) agree volumes for the sample items to the original bill of lading or other source documents; and
- (ii) for sales or deliveries into the control area, determine that oxygenate content meets the required oxygen content standard identified in 18 AAC 53.020 by examining bills of lading;
- (5) calculate the oxygen content units by multiplying the required oxygen content identified in 18 AAC 53.020 by the total volume of oxygenated gasoline sold or dispensed into the control area as indicated in the inventory reconciliation report, and agree to the reports submitted to the department as required in 18 AAC 53.100;
- (6) calculate the actual total oxygen credit units generated by adding together the oxygen content units of each batch or truckload of oxygenated gasoline that was sold or dispensed in the control area;
- (7) calculate the adjusted actual total oxygen content units that are the sum of
 - (A) the actual total oxygen content units generated in (6) of this subsection; plus
 - **(B)** the total oxygen credits purchased or acquired through trade; minus
 - (C) the total oxygen credits sold or given away through trade;
- (8) test the actual total oxygen content units in (6) of this subsection as follows:
 - (A) for CARs using rack and splash blending, recompute oxygen content by weight for a representative sample of deliveries based on detailed meter readings of gasoline, blendstocks, and oxygenate receipts; and
 - **(B)** for CARs using in-tank blending of gasoline, blendstocks, and oxygenates, obtain a register of RWOC by tank and using the individual sample items selected in (3) and (4) of this subsection, test the calculation of running totals; and
 - (C) for CARs using in-tank blending of gasoline, blendstocks, and oxygenates, and where laboratory analysis is used within the CAR's weighted average calculation, select individual analysis reports of oxygenated gasoline receipts and deliveries during the period on a representative sample basis to
 - (i) review laboratory results for consistency with the CAR's calculations, noting oxygen volume and specific gravity;
 - (ii) recalculate oxygen by weight; and
 - (iii) agree information on laboratory reports to underlying delivery and receiving

information;

- (9) obtain a register of oxygen credit purchases and sales, and select representative samples of oxygen credits purchased and oxygen credits sold, and
 - (A) agree selected oxygen credit transactions to the transfer agreement or other supporting documentation, noting the volume and oxygen content of the gasoline associated with the oxygen credits; and
 - **(B)** agree to the transfer agreement or other supporting documentation that the
 - (i) oxygen credits are generated in the same control area as they are used;
 - (ii) oxygen credits are generated in the same averaging period as they are used;
 - (iii) ownership of oxygen credits is transferred only between CARs; and
 - (iv) oxygen credit transfer agreement is made no later than 15 days after the last day of the control period in which the oxygen credits are generated; and
- (10) prepare an attestation report to the CAR client that complies with the requirements in (b) of this section, and that indicates the results of performing the attest engagement under this section.
- (g) The attestation report required in (f)(10) of this section must include
 - (1) the description and location of all records reviewed during the attest engagement;
 - (2) the names and positions of all persons responsible for preparing the CAR's reports to the department, including persons who gathered information, operational personnel, and officers;
 - (3) the location and description of the refinery, import facility, or terminal audited, including its operating procedures and internal controls;
 - (4) specific reports and examples of calculations performed in the conduct of the attest engagement;
 - (5) summaries or duplicates of records that support the CPA's findings, analyses, and conclusions; and
 - (6) a complete list of all discrepancies that the CPA found during the conduct of the attest engagement.

Editor's note: The document entitled [,] *Codification of Statements on Standards for Attestation Engagements*, referred to in this section may be reviewed at the department's Anchorage, Fairbanks, or Juneau offices, or it may be ordered from the American Institute of Certified Public Accountants, P.O. Box 1003, New York, NY 10108-1003 (800-334-6961).

18 AAC 53.190. SUSPENSION OF REQUIREMENTS

- (a) Subject to (b) of this section, if a control area attains the NAAQS for carbon monoxide, and after consultation with and approval by the administrator, the commissioner will suspend the oxygenated gasoline requirements of this chapter in that control area.
- **(b)** If the requirements for oxygenated gasoline in a control area are suspended under (a) of this section, and the ambient carbon monoxide concentration for that control area subsequently equals or exceeds 8.5 ppm for an eight-hour average, the department will reimplement the requirements of this chapter for the next control period. The department will publish notice of the decision to reimplement the oxygenated gasoline requirements at least 180 days before the next control period begins.

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18 AAC 53.990. DEFINITIONS

Unless the context indicates otherwise, in this chapter

- (1) "administrator" means the administrator of the EPA;
- (2) "agree" means to compare two sets of records to determine whether the records are consistent with each other:
- (3) "agreed-upon procedures" means procedures for conducting an attest engagement that have been jointly established by the independent certified public accountant conducting the attest engagement and the CAR for whom the attest engagement is being conducted, and that have been approved by the department before the actual attest engagement;
- (4) "attest engagement" means an audit of nonfinancial records;
- (5) "blender CAR" means a CAR who owns gasoline that is sold or transferred from a control area oxygenate blending facility;
- (6) "BOL" means bill of lading;
- (7) "CAR" means a control area responsible party, including a blender CAR;
- (8) "carrier" means a person who transports, stores, or causes the transportation or storage of gasoline at any point in the gasoline distribution network without taking title to or otherwise having ownership of the gasoline and without altering the quality or quantity of the gasoline;
- (9) "commissioner" means the commissioner of the Department of Environmental Conservation;
- (10) "control area" means a geographic area described in 18 AAC 53.010(c);

- (11) "control area oxygenate blending facility" means a facility or truck at which oxygenate is added to gasoline or blendstock that is intended for use in a control area and at which the quality or quantity of gasoline is not otherwise altered except through the addition of deposit control additives;
- (12) "control area responsible party" means a person who owns gasoline that is sold or transferred from a
 - (A) control area terminal; or
 - **(B)** control area oxygenate blending facility;
- (13) "control area terminal" means a facility, regardless of whether that facility is located in a control area,
 - (A) that is capable of receiving gasoline in bulk, such as by pipeline, marine vessel, or barge, or at which gasoline is altered either in quantity or quality, excluding the addition of deposit control additives; and
 - **(B)** from which gasoline that is intended for use in a control area during a control period is sold or transferred into trucks for transportation to a control area oxygenate blending facility, retail outlet, or wholesale purchaser-consumer facility;
- (14) "control period" means a period established under 18 AAC 53.010;
- (15) "department" means the Department of Environmental Conservation;
- (16) "dispense" means to sell or transfer gasoline
 - (A) to the ultimate consumer at a retail outlet; or
 - **(B)** from a wholesale purchaser-consumer facility;
- (17) "distribute" means to transport, store, or cause the transportation or storage of gasoline at any point between a gasoline refinery or importer's facility and a retail outlet or wholesale purchaser-consumer's facility;
- (18) "distributor" means a person who distributes gasoline;
- (19) "EPA" means the United States Environmental Protection Agency;
- (20) "fuel additive" means that part of the fuel that is not hydrocarbon;

- (21) "importer" means a person, other than an ultimate consumer, who brings gasoline owned by that person from outside the state into a control area for sale or use;
- (22) "motor vehicle" means a self-propelled, gasoline-powered vehicle, designed to operate on a highway;
- (23) "NAAQS" or "national ambient air quality standards" means the primary standards for carbon monoxide set by the EPA in 40 C.F.R. 50.8, as amended through July 1, 1991;
- (24) "nonoxygenated gasoline" means gasoline that does not comply with 18 AAC 53.020;
- (25) "oxygen content" means the percentage of oxygen by weight contained in a gasoline blend, based upon its percentage oxygenate by volume, excluding denaturants and other non-oxygen-containing components and adjusted to 60 degrees Fahrenheit;
- (26) "oxygen content units" are the result of multiplying the volume of gasoline containing oxygenate, measured in gallons, by the oxygen content, measured in percent of oxygen by weight;
- (27) "oxygen credits" means a marketable oxygen credit provided for under 42 U.S.C. 7545(m) (Clean Air Act, section 211), as amended through November 15, 1990, and created in accordance with 18 AAC 53.045;
- (28) "oxygenate" means a substance that, when added to gasoline, increases the amount of oxygen in that gasoline blend;
- (29) "oxygenate blender" means a person who owns, leases, operates, controls, or supervises a control area oxygenate blending facility;
- (30) "oxygenated gasoline" means gasoline that contains not less than the percent oxygen by weight required by 18 AAC 53.020;
- (31) "person subject to this chapter" means a person listed or described in 18 AAC 53.005(c);
- (32) "ppm" means parts per million;
- (33) "refiner" means a person who owns, leases, operates, controls, or supervises a refinery that produces gasoline for use in a control area;
- (34) "refinery" means a plant at which gasoline is produced;
- (35) "reseller" means a person who purchases gasoline and resells or transfers it to a retailer or a wholesale purchaser-consumer;

- (36) "retail outlet" means an establishment at which gasoline is sold or offered for sale to the ultimate consumer other than the wholesale purchaser-consumer;
- (37) "retailer" means a person who owns, leases, operates, controls, or supervises a retail outlet;
- (38) "terminal" means a facility at which gasoline is transferred into trucks for transportation to retail outlets or wholesale purchaser-consumer facilities;
- (39) "VMT" means vehicle miles traveled;
- (40) "wholesale purchaser-consumer" means a person who
 - (A) is an ultimate consumer of gasoline;
 - **(B)** purchases or obtains gasoline from a supplier or distributor for use in a motor vehicle;
 - **(C)** receives delivery of gasoline into a storage tank with a capacity of at least 550 gallons that is substantially under the control of that person; and
 - (**D**) owns or operates a gasoline dispenser.

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